AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of the Claims:

1. (Currently Amended) A method for treating a vegetable material formed by member selected from the group consisting whole oat grain, whole rye grain, ~~whole barley grain~~ and an oat bran concentrate, with a view to improving the solubility in an aqueous phase of non-starch polysaccharides β-glucan or pentosan contained in it the material, characterized in that the material is crushed by using mechanical energy in an amount of 0.15-0.39 kWh/kg to a particle size less than 100 μm thereby producing a product, at least a major portion of the cells containing β-glucan or pentosan in the material being damaged during crushing, to produce particles containing β-glucan or pentosan with an improved solubility and a capacity to generate viscosity as the product is contacted with the aqueous phase.

2. (Previously Presented) The method as defined in claim 1, characterized in that at least a major portion of the non-starch polysaccharides contained in the cells end up in particles as produced by the crushing with a particle size smaller than that of the respective initial cell of the non-starch polysaccharide.

3. (Cancelled)

4. (Previously Presented) The method as defined in claim 1, characterized in that the material is crushed to a particle size less than 50 μm.

5. (Previously Presented) The method as defined in claim 4, characterized in that the material contains aleuron and/or subaleuron layers of grains, which are crushed to a particle size less than 50 μm.

6-8. (Cancelled)

9. (Previously Presented) The method as defined in claim 1, characterized in that the mechanical energy is generated by the joint effect of heat, pressure and shearing forces.

10. (Previously Presented) The method as defined in claim 1, characterized in that crushing is preformed by extrusion.

11. (Previously Presented) The method as defined in claim 10, characterized in that the material to be crushed is pre-treated to moisture in the range from 6 to 20%.

12. (Previously Presented) The method as defined in claim 1, characterized in that the material to be crushed is mixed with a greater amount of liquid medium and the mixture is homogenized under a pressure of 50 to 800 bar.

13. (Withdrawn) A particulate product obtained by a method defined in claim 1, characterized in that the product contains a vegetable material, which has been crushed to form particles of a size less than 100 μm, in which at least a major portion of the cells containing non-starch polysaccharides in the material has been damaged, the non-starch polysaccharides contained in the crushed particles having enhanced solubility in an aqueous phase with which the product has been brought into contact.

14-15. (Cancelled)

16-17. (Cancelled)

18. (Previously Presented) The method as defined in claim 4, characterized in that the material is crushed to a particle size less than 20 μm.

19. (Previously Presented) The method as defined in claim 5, characterized in that the material contains aleuron and/or subaleuron layers of grains, which are crushed to a particle size less than 20 μm.

20. (New) A method for improving digestive solubility of a food or fodder comprising providing a food to a human comprising the product obtained by the method of claim 1.

21. (New) A method for controlling viscosity increase of a food or fodder comprising providing a food to a human comprising the product obtained by the method of claim 1.